

## Chapter 1 Task: Visualizing the Cell

### Assignment

You will create two visual representations of cells: one plant cell, one animal cell. You must create this visual representation on your own, either by hand or by cutting-and-pasting pictures from other sources. We expect that most visualizations will be two-dimensional, although three-dimensional models are also acceptable.

Specific requirements for your visualization:

- Include each of the following cell components in your visualization:
  1. cell membrane
  2. cytoplasm
  3. mitochondria
  4. ribosomes
  5. endoplasmic reticulum
  6. vesicles
  7. golgi body
  8. nucleus
  9. vacuoles
  10. cytoskeleton
  11. cell wall
  12. chloroplasts (if applicable)
- Label each of the parts of the cell, or include a legend
- Include a guide so that people viewing your visualization can understand the function of each part of the cell (**in your own words!**)
- Sources (including your textbook) of information must be properly cited in APA format (in a bibliography or on the back of your visualization)
  - You do not have to cite sources for images

Be creative and ambitious in your visualization!

**Ask yourself the following questions before handing your project in:**

- Did I include each of the twelve components of the cell in each of the visualizations (if applicable)?
- Does my diagram / legend help people to understand which component is which?
- Does my guide explain to people what each component of the cell does?
- Did I demonstrate creativity in the visualization (as opposed to looking like I just threw something together without care)?
- Did I cite my sources in APA format?

**The following is a checklist of things to hand in:**

- ☐ A visualization of an animal cell (with labels or a legend)
- ☐ A visualization of a plant cell (with labels or a legend)
- ☐ A guide explaining the function of each component
- ☐ A bibliography

## **Marking Scheme for “Visualizing the Cell”**

### **Knowledge: 0 1 2 3 4 5 6**

- All applicable components are included in both visualizations
- Guide demonstrates knowledge of the function of each part of the cell

### **Inquiry: 0 1 2 3 4**

- Research is evident and information is relevant and correct
- Ideas are presented in the student's own words
- Resources are cited in APA format

### **Communication: 0 1 2 3 4**

- It is clear which component is which (clarity of labels/legend)
- Language used is appropriate for academic level

### **Visual Appeal and Creativity: 0 1 2 3 4 5 6**

- Overall impact of the visualization: is it impressive?
- Variety of images are used
- Images are eye-catching and effective
- Guide shows some originality

Final notes:

- It is not acceptable to download a single picture of a cell, cut it apart, and then paste it back together again in a different arrangement. Be creative!
- Remember to include a bibliography, and put your research into your own words!

**Due date is**

**Window of opportunity** closes on